

5

Reference List

1. Pimm,M.V. & Gribben,S.J. Toxicity associated with the formation and clearance of immune complexes between antitumour monoclonal antibodies and syngeneic anti-idiotypic antibodies in mice. *J. Cancer Res. Clin. Oncol.* 10 **119**, 41-45 (1992).
2. Pimm,M.V. & Gribben,S.J. Influence of syngeneic (anti-idiotypic) antibody responses on biodistribution and tumour localisation of murine monoclonal antibodies and fragments. *Anticancer Res.* **13**, 241-248 (1993).
- 15 3. Kairemo,K.J. Radioimmunotherapy of solid cancers: A review. *Acta Oncol.* **35**, 343-355 (1996).
4. Fehr,T. *et al.* Role of repetitive antigen patterns for induction of antibodies against antibodies. *J. Exp. Med.* **185**, 1785-1792 (1997).
5. Hansen,J. Common cancers in the elderly. *Drugs Aging* **13**, 467-478 (1998).
- 20 6. Lode,H.N. *et al.* Synergy between an antiangiogenic integrin alphav antagonist and an antibody-cytokine fusion protein eradicates spontaneous tumor metastases. *Proc. Natl. Acad. Sci. U. S. A* **96**, 1591-1596 (1999).

7. Kramer,R.H., Gonzalez,R. & Nicolson,G.L. Metastatic tumor cells adhere preferentially to the extracellular matrix underlying vascular endothelial cells. *Int. J. Cancer* **26**, 639-645 (1980).
8. Buck,C.A. & Horwitz,A.F. Cell surface receptors for extracellular matrix molecules. *Annu. Rev. Cell Biol.* **3**, 179-205 (1987).
9. Buck,C.A. & Horwitz,A.F. Integrin, a transmembrane glycoprotein complex mediating cell-substratum adhesion. *J. Cell Sci. Suppl* **8**, 231-250 (1987).
10. Fields,G.B. Synthetic peptides and tumor cell metastasis. *Pept. Res.* **6**, 115-120 (1993).
- 10 11. Lochter,A. & Bissell,M.J. Involvement of extracellular matrix constituents in breast cancer. *Semin. Cancer Biol.* **6**, 165-173 (1995).
12. Humphries,M.J., Yasuda,Y., Olden,K. & Yamada,K.M. The cell interaction sites of fibronectin in tumour metastasis. *Ciba Found. Symp.* **141**, 75-93 (1988).
- 15 13. Castronovo,V. & Sobel,M.E. Laminin and fibronectin increase the steady state level of the 67 kD high affinity metastasis-associated laminin receptor mRNA in human cancer cells. *Biochem. Biophys. Res. Commun.* **168**, 1110-1117 (1990).
14. McCarthy,J.B., Skubitz,A.P., Palm,S.L. & Furcht,L.T. Metastasis inhibition of different tumor types by purified laminin fragments and a heparin-binding fragment of fibronectin. *J. Natl. Cancer Inst.* **80**, 108-116 (1988).
- 20

15. Castronovo, V. *et al.* Immunodetection of the metastasis-associated laminin receptor in human breast cancer cells obtained by fine-needle aspiration biopsy. *Am. J. Pathol.* **137**, 1373-1381 (1990).
16. Cioce, V. *et al.* Increased expression of the laminin receptor in human colon
5 cancer. *J. Natl. Cancer Inst.* **83**, 29-36 (1991).
17. Castronovo, V. Laminin receptors and laminin-binding proteins during tumor invasion and metastasis. *Invasion Metastasis* **13**, 1-30 (1993).
18. Cioce, V., Margulies, I.M., Sobel, M.E. & Castronovo, V. Interaction between
the 67 kilodalton metastasis-associated laminin receptor and laminin. *Kidney*
10 *Int.* **43**, 30-37 (1993).
19. Magnifico, A. *et al.* Peptide G, containing the binding site of the 67-kDa laminin receptor, increases and stabilizes laminin binding to cancer cells. *J. Biol. Chem.* **271**, 31179-31184 (1996).
20. Waltregny, D., de Leval, L., Menard, S., de Leval, J. & Castronovo, V.
15 Independent prognostic value of the 67-kd laminin receptor in human prostate cancer. *J. Natl. Cancer Inst.* **89**, 1224-1227 (1997).
21. Menard, S., Castronovo, V., Tagliabue, E. & Sobel, M.E. New insights into the metastasis-associated 67 kD laminin receptor. *J. Cell Biochem.* **67**, 155-165 (1997).

22. Alino,S.F., Únda,F.J. & Perez-Yarza,G. Laminin surface binding sites and metastatic potential of 3LL tumor cells, increased by indomethacin. *Biochem. Biophys. Res. Commun.* **167**, 731-738 (1990).
23. Ruoslahti,E. & Giancotti,F.G. Integrins and tumor cell dissemination.
5 *Cancer Cells* **1** , 119-126 (1989).
24. Ruoslahti,E. How cancer spreads. *Sci. Am.* **275**, 72-77 (1996).
25. Ruoslahti,E. Integrins as signaling molecules and targets for tumor therapy. *Kidney Int.* **51**, 1413-1417 (1997).
26. Yi,M. & Ruoslahti,E. A fibronectin fragment inhibits tumor growth,
10 angiogenesis, and metastasis. *Proc. Natl. Acad. Sci. U. S. A* **98**, 620-624
 (2001).
27. Koliakos,G.G., Tsilibary,E.C. & Charonis,A.S. A melanoma cell surface laminin binding protein with apparent Mr 90,000. *Connect. Tissue Res.* **26**, 167-180 (1991).
- 15 28. Kouzi-Koliakos,K. *et al.* In vivo binding of the radioiodinated peptide YIGSR on B16 melanoma cells. *Invasion Metastasis* **16**, 322-329 (1996).
29. Koliakos,G., Trontzos,C., Kouzi-Koliakos,K., Kanellaki,M. & Grammaticos,P. Lung carcinoma imaging using a synthetic laminin derivative radioiodinated peptide YIGSR. *J. Nucl. Med.* **38**, 1940-1944
20 (1997).

30. Iwamoto,Y. *et al.* Inhibition of angiogenesis, tumour growth and experimental metastasis of human fibrosarcoma cells HT1080 by a multimeric form of the laminin sequence Tyr-Ile-Gly-Ser-Arg (YIGSR). *Br. J. Cancer* **73**, 589-595 (1996).
- 5 31. Ruoslahti,E. Cell adhesion and tumor metastasis. *Princess Takamatsu Symp.* **24**, 99-105 (1994).
32. Ruoslahti,E. Fibronectin and its alpha 5 beta 1 integrin receptor in malignancy. *Invasion Metastasis* **14**, 87-97 (1994).
33. Pasqualini,R., Bourdoulous,S., Koivunen,E., Woods,V.L. & Ruoslahti,E. A
10 polymeric form of fibronectin has antimetastatic effects against multiple tumor types. *Nat. Med.* **2**, 1197-1203 (1996).
34. Ruoslahti,E. Fibronectin and its integrin receptors in cancer. *Adv. Cancer Res.* **76**, 1-20 (1999).
35. Iwamoto,Y. *et al.* YIGSR, a synthetic laminin pentapeptide, inhibits
15 experimental metastasis formation. *Science* **238**, 1132-1134 (1987).
36. Graf,J. *et al.* A pentapeptide from the laminin B1 chain mediates cell adhesion and binds the 67,000 laminin receptor. *Biochemistry* **26**, 6896-6900 (1987).
37. Alino,S.F., Unda,F.J. & Perez-Yarza,G. Laminin surface binding sites and
20 metastatic potential of 3LL tumor cells, increased by indomethacin. *Biochem. Biophys. Res. Commun.* **167**, 731-738 (1990).

38. Yamamura,K., Kibbey,M.C. & Kleinman,H.K. Melanoma cells selected for adhesion to laminin peptides have different malignant properties. *Cancer Res.* **53**, 423-428 (1993).
39. Sivolapenko,G.B. *et al.* Imaging of metastatic melanoma utilising a
5 technetium-99m labelled RGD-containing synthetic peptide. *Eur. J. Nucl. Med.* **25**, 1383-1389 (1998).
40. Soszka,T. *et al.* Inhibition of murine melanoma cell-matrix adhesion and experimental metastasis by albolabrin, an RGD-containing peptide isolated from the venom of *Trimeresurus albolabris*. *Exp. Cell Res.* **196**, 6-12 (1991).
- 10 41. Saiki,I. *et al.* Antimetastatic effects of synthetic polypeptides containing repeated structures of the cell adhesive Arg-Gly-Asp (RGD) and Tyr-Ile-Gly-Ser-Arg (YIGSR) sequences. *Br. J. Cancer* **60**, 722-728 (1989).
42. Saiki,I. *et al.* Anti-metastatic and anti-invasive effects of polymeric Arg-Gly-Asp (RGD) peptide, poly(RGD), and its analogues. *Jpn. J. Cancer Res.*
15 **81**, 660-667 (1990).
43. Kumagai,H., Tajima,M., Ueno,Y., Giga-Hama,Y. & Ohba,M. Effect of cyclic RGD peptide on cell adhesion and tumor metastasis. *Biochem. Biophys. Res. Commun.* **177**, 74-82 (1991).
44. Komazawa,H. *et al.* Inhibition of tumor metastasis by Arg-Gly-Asp-Ser
20 (RGDS) peptide conjugated with sulfated chitin derivative, SCM-chitin-RGDS. *Clin. Exp. Metastasis* **11**, 482-491 (1993).

45. Hyacinthe, L.M., Jarrett, T.W., Gordon, C.S., Vaughan, E.D. & Whalen, G.F.
Inhibition of bladder tumor cell implantation in cauterized urothelium,
without inhibition of healing, by a fibronectin-related peptide (GRGDS).
Ann. Surg. Oncol. **2**, 450-456 (1995).
- 5 46. Fujii, H. *et al.* Antimetastatic activities of synthetic Arg-Gly-Asp-Ser
(RGDS) and Arg-Leu-Asp-Ser (RLDS) peptide analogues and their
inhibitory mechanisms. *Biol. Pharm. Bull.* **18**, 1681-1688 (1995).
47. Fujii, H. *et al.* Inhibition of tumor invasion and metastasis by peptidic
mimetics of Arg-Gly Asp (RGD) derived from the cell recognition site of
10 fibronectin. *Oncol. Res.* **8**, 333-342 (1996).
48. Miyata, K. *et al.* A YIGSR-containing novel mutein without the detrimental
effect of human TNF- α of enhancing experimental pulmonary
metastasis. *Clin. Exp. Metastasis* **10**, 267-272 (1992).
49. Yamamura, K., Kibbey, M.C., Jun, S.H. & Kleinman, H.K. Effect of Matrigel
15 and laminin peptide YIGSR on tumor growth and metastasis. *Semin. Cancer
Biol.* **4**, 259-265 (1993).
50. Nomizu, M., Yamamura, K., Kleinman, H.K. & Yamada, Y. Multimeric forms
of Tyr-Ile-Gly-Ser-Arg (YIGSR) peptide enhance the inhibition of tumor
growth and metastasis. *Cancer Res.* **53**, 3459-3461 (1993).
- 20 51. Kim, W.H., Schnaper, H.W., Nomizu, M., Yamada, Y. & Kleinman, H.K.
Apoptosis in human fibrosarcoma cells is induced by a multimeric synthetic

- Tyr-Ile-Gly-Ser-Arg (YIGSR)-containing polypeptide from laminin.
Cancer Res. **54**, 5005-5010 (1994).
52. Kaneda, Y. *et al.* Synthetic cell-adhesive laminin peptide YIGSR conjugated with polyethylene glycol has improved antimetastatic activity due to a longer half-life in blood. *Invasion Metastasis* **15**, 156-162 (1995).
53. Zalipsky, S., Puntambekar, B., Boulikas, P., Engbers, C.M. & Woodle, M.C. Peptide attachment to extremities of liposomal surface grafted PEG chains: preparation of the long-circulating form of laminin pentapeptide, YIGSR. *Bioconjug. Chem.* **6**, 705-708 (1995).
54. Sivanandaiah, K.M. *et al.* Synthetic peptides related to laminin pentapeptide (YIGSR) fragment. *Indian J. Exp. Biol.* **34**, 658-662 (1996).
55. Zhao, M., Kleinman, H.K. & Mokotoff, M. Synthesis and activity of partial retro-inverso analogs of the antimetastatic laminin-derived peptide, YIGSR-NH₂. *J. Pept. Res.* **49**, 240-253 (1997).
56. Maeda, M. *et al.* Amino acids and peptides. XXXI. Preparation of analogs of the laminin-related peptide YIGSR and their inhibitory effect on experimental metastasis. *Chem. Pharm. Bull. (Tokyo)* **46**, 347-350 (1998).
57. Mu, Y. *et al.* Bioconjugation of laminin peptide YIGSR with poly(styrene co-maleic acid) increases its antimetastatic effect on lung metastasis of B16-BL6 melanoma cells. *Biochem. Biophys. Res. Commun.* **255**, 75-79 (1999).

